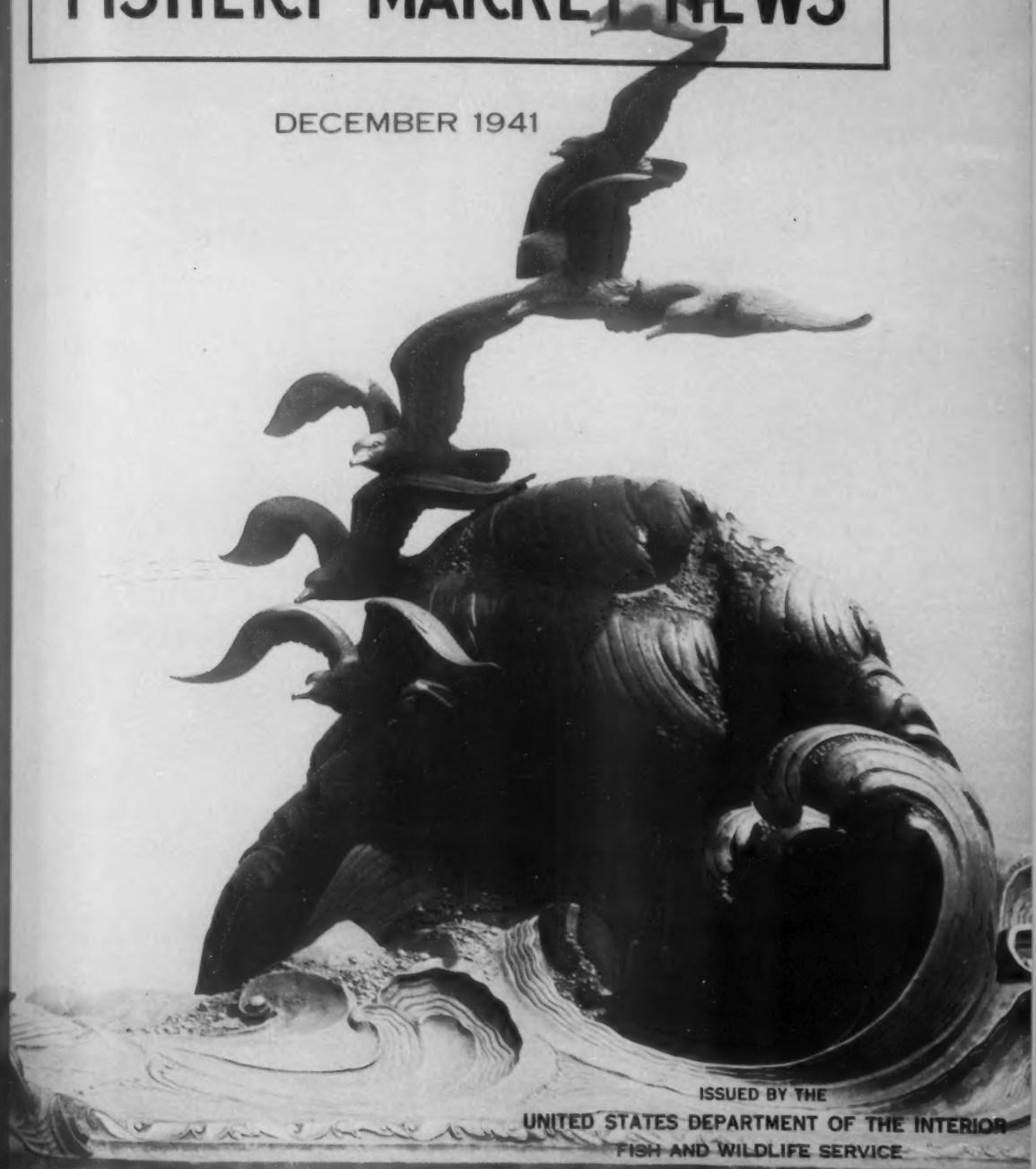


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FISHERY MARKET NEWS

DECEMBER 1941



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WASHINGTON



FISHERY MARKET NEWS

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FISHERY MARKET NEWS

A REVIEW OF CONDITIONS AND TRENDS OF THE COMMERCIAL FISHERIES

December 1941

Washington, D. C.

Vol. 3, No. 12

SUMMARY

Sources and Seasons of Fresh Fishery Products Received at New York City, 1940.--During a normal year the New York wholesale market receives 154 classifications of fresh and frozen fishery products from 38 States, Alaska, 9 Canadian Provinces, Newfoundland, and 22 foreign countries. In 1940 receipts totaled 266,000,000 pounds. The salt-water market received 235,000,000 pounds, the fresh-water market 25,000,000 pounds, and over 6,000,000 pounds consisted of imports entered at New York City. Ninety-four percent of the receipts were fresh and 6 percent frozen.

Fresh Fish

At the end of November, wholesale prices were equal to the 11-year peak which was reached in mid-November.

Landings of rosefish during October in Boston and Gloucester, Mass., and Portland, Maine, were the largest for this month since the inception of the fishery.

There has been a serious shortage of oysters, fish, and labor with which to prepare these products for the market in Mississippi.

Detroit dealers report high prices and low production of many cheaper species of Michigan fish have brought about the use of more marine varieties.

Frozen Fish

There has been a large increase in the frozen stocks of fresh-cooked shrimp meat in the Gulf area.

Holdings of frozen fishery products in domestic cold-storage plants reached a new high of 115,000,000 pounds. The freezings of fishery products continued above normal for the month ending in mid-November and the total for the first 11 months is 29,000,000 pounds greater than the total poundage frozen in any previous year.

Canned Fish Trade

Unofficial reports state that the Maine pack of sardines may approach 4,000,000 cases.

Canned salmon prices have maintained the level of recent months and unsold stocks at the end of November were under 1 million cases. The British Columbia salmon pack is the largest on record.

The pack of California sardines is nearly 4,000,000 cases.

Foreign Fishery Trade

Import and export data will not be released until further notice.

Byproducts

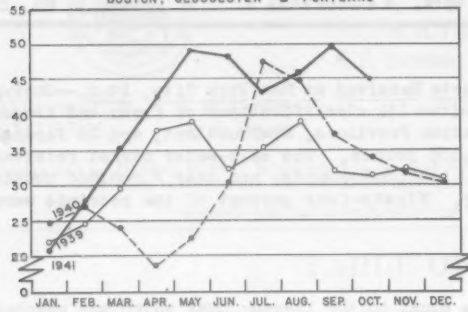
A cooperative formed in Seattle to handle fish livers has obtained good prices for its output of oil.

The fisheries for dogfish and soupfin sharks in Washington has been exceedingly active. On November 15 the liver market weakened and prices were lower during the balance of the month.

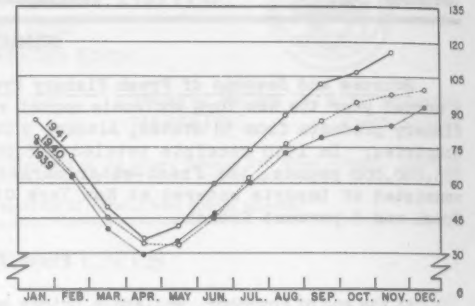
TRENDS OF FISHERY TRADE

In millions of pounds

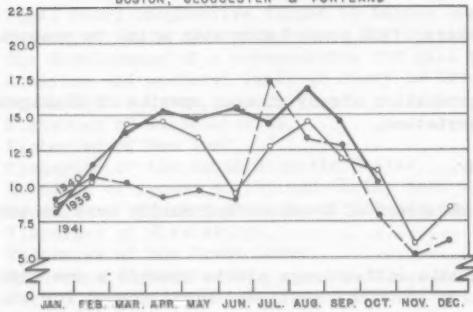
VESSEL LANDINGS, ALL FRESH FISH
BOSTON, GLOUCESTER & PORTLAND



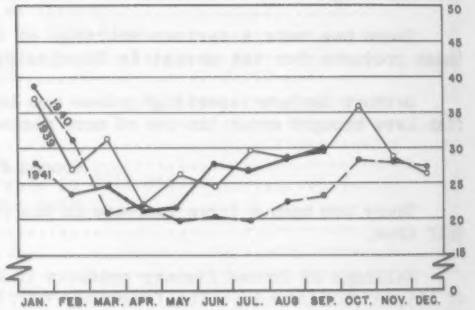
DOMESTIC COLD-STORAGE HOLDINGS OF FROZEN FISH



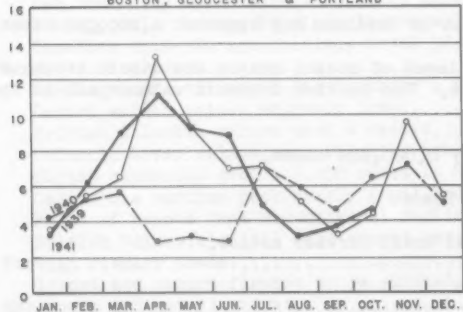
VESSEL LANDINGS, FRESH HADDOCK
BOSTON, GLOUCESTER & PORTLAND



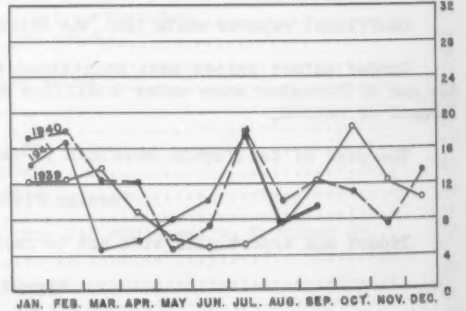
IMPORTS OF EDIBLE FISHERY COMMODITIES



VESSEL LANDINGS, FRESH COD
BOSTON, GLOUCESTER & PORTLAND



EXPORTS OF EDIBLE FISHERY COMMODITIES



SOURCES AND SEASONS OF FRESH FISHERY PRODUCTS RECEIVED AT NEW YORK CITY, 1940

By W. H. Dumont

Associate Fishery Marketing Specialist, New York, N. Y.

Fish and Wildlife Service

In a normal year the New York Wholesale Market draws its supplies of fresh and frozen fishery products from 38 States, Alaska, 9 Canadian Provinces, Newfoundland and 22 foreign countries. Of the 154 classifications handled, 92 represent salt-water fish, 27 fresh-water fish and 35 shellfish and miscellaneous items. During 1940 the New York Fishery Market News office reported receipts totaling 266 million pounds. Of this quantity the salt-water market, known as Fulton Market, received 235 million pounds, the fresh-water market in Peck Slip an estimated 25 million pounds, and over 6 million pounds consisted of imports arriving by vessel and entered at New York City. About 94 percent of the receipts were fresh and 6 percent frozen, the latter mostly smelt, mackerel, halibut, salmon, shrimp and squid. About 5 percent of the imports of fish were fresh and 33 percent shellfish and miscellaneous varieties.

Most of the fresh-water fish received in Peck Slip is fresh and represents receipts of 24 species. The leading variety, both in volume and value, is whitefish, while yellow pike is considered the second most important, followed by carp. Lake herring, suckers--white mullet, sturgeon mullet and redbreast--lake trout, pickerel (jacks), buffalofish (winter carp), cisco, sauger and blue pike, are also marketed in fair quantities. Chubs, spoonbill catfish, sturgeon, and tullibees are handled during their fishing seasons, but are sold to "smokers" rather than to the "fresh" trade. In addition, there are 7 minor species which are in light demand and only on the market from time to time. These are bowfin (dogfish), menominee whitefish, rock bass, sheepshead, sunfish, white bass, and yellow perch.

The majority of New York's supply of fresh-water fish, with the exception of buffalofish and carp, comes from the Great Lakes. During the winter when ice and weather conditions hinder fishing on these lakes, shipments of whitefish, pickerel, lake trout, and yellow pike arrive from the Canadian Provinces of Alberta, Manitoba and Saskatchewan. Most of the buffalofish are shipped from the Mississippi River Valley States with small quantities from as far west as Arizona. Carp come mainly from Wisconsin, Iowa, Michigan, and Ohio.

Fulton Market received 165 million pounds of salt-water varieties, 70 million pounds of shellfish and miscellaneous items, and only 375,000 pounds of fresh-water fish in 1940. Of the salt-water varieties, 27 are available in varying quantities the year around, while 28 others are to be had during 6 months or more. New York, including fishing vessel landings at New York City, supplied the largest number of different species as well as the greatest volume in 1940. Nearby New Jersey shipped the next largest variety but in quantity was surpassed by Massachusetts. Of the Canadian Provinces, British Columbia provided the greatest volume, and Nova Scotia the greatest variety.

Three fresh-water species are handled exclusively by the salt-water dealers. Brook trout and catfish (including bullheads) are sold 12 months of the year, while crappie from Florida are generally available from September to March. A wide variety of shellfish may be purchased throughout the year in Fulton Market. The most important are hard and soft clams, shrimp, sea scallops, lobsters, conchs, crab meat, frog legs, and mussels. Obtainable for 6 or more months are hard and soft crabs, lobster meat, shell and shucked oysters bay scallops, sea eggs, periwinkles, and squid.

Receipts of the more important fresh fishery products on the salt-water market only are covered in the following table which includes all the sources from which more than negligible shipments were received. Frozen classifications are not listed since the many frozen varieties usually are available from cold storage stocks throughout the year^{1/}. In the table the months are represented by the figures 1 to 12; thus 1-3 means January, February and March; 10-4 indicates October to April, inclusive; while 5,7 means May and July only. The seasons shown indicate to some extent the shipping and producing periods in the various States and Provinces listed. Certain varieties, however, may be obtainable in producing areas when they are not listed as available in the salt-water market in New York. This may result because of more abundant supplies from areas nearer to New York, seasonal abundance of other varieties, and lack of steady demand.

^{1/} Detailed data on the receipts of frozen fishery products are available in the annual summary "Receipts of Fresh and Frozen Salt-water Fishery Products at New York, 1940" released by the local office, and in "Relative Seasonal Supplies of Fishery Products at New York, 1939" in the June 1940 FISHERY MARKET NEWS.

Receipts of Fresh Fish on the Salt-water Market, New York City, 1940: By Sources of Supply and Seasons

Species	Receipts in 1940	All areas	Maine	Mass	R.I.	Conn	N.Y.	Laurens	N.J.	Del	Md	Va	N.C.	S.C.	Ga	Fla	La	Cal	Ore	Wash	E.C.	N.S.	N.B.	Que	Canada
SALT-WATER FISH	Lbs.																								
Albacore	56,870	8-10	-	-	-	-	8-10	-	8-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alewives	219,119	3-12	-	-	-	-	3-12	-	4-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anchovies	28,970	7-10	-	-	-	-	7-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bluefish	1,799,784	1-12	-	-	-	-	6-10	-	6-10	-	6-10	5-9	5-10	-	-	1-12	-	-	-	-	-	-	-	-	-
Bonito	1,172,540	6-11	-	-	-	-	6-10	-	6-11	-	6-7	6-7	6-11	-	-	-	-	-	-	-	-	-	-	-	-
Butterfish	7,350,572	1-12	-	-	-	-	4-12	8-5	5-12	-	5-11	10-5	-	-	-	-	-	-	-	-	-	-	-	-	-
Cod:																									
Market	9,253,367	1-12	1-12	1-12	1-12	5-7	11-5	1-12	11-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steak	12,321,142	1-12	1-12	1-12	8-6	1-11	11-5	1-12	11-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croaker	2,630,251	1-12	-	-	-	-	8-10	-	5-10	-	4-10	1-12	12-4	-	-	-	-	-	-	-	-	-	-	-	-
Cunner (Bergall)	8,936	6-11	-	-	-	-	7-11	6-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quak	4,277	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dogfish	75,035	5-12	-	-	-	-	5-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trout:																									
Black	7,694	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red (Channel bass)	10,591	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eels:																									
Common	783,193	1-12	1-12	1-12	5-2	1-7	1-12	-	1-12	4-12	2-12	1-12	9-5	-	10-4	10-4	-	-	-	-	-	-	-	-	9-3
Sea (Conger)	66,854	1-4	-	-	-	-	-	-	1-4	-	-	1-3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bel pont (Conger eel)	15,481	12-4	-	-	-	-	12-4	-	12-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Flounders:																									
Blackback	13,235,581	1-12	1-12	1-12	1-12	1-12	1-12	1-12	11-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dab, sea	154,318	1-12	11-6	1-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluke	3,132,191	1-12	-	-	-	-	5-11	5-10	5-11	5-10	1-12	1-8	-	-	-	-	-	-	-	-	-	-	-	-	-
Sole, gray	2,408,933	1-12	1-12	1-12	-	-	-	-	1-6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sole, lemon	1,620,771	2-12	-	-	-	-	2-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellowtail (Dab)	21,344,047	1-12	-	-	-	-	1-12	1-12	1-12	9-6	1-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Small quantities may be received during one or more months of the year.

December 1941

FISHERY MARKET NEWS

Receipts of Fresh Fish on the Salt-water Market, New York City, 1940: By Sources of Supply and Seasons (Continued)

Species	Receipts in 1940 Lbs.	All areas	Maine	Mass	R.I.	Conn	N.Y.	Land-N.J.	Del	Va	N.C.	S.C.	Ga	Fla	La	Cal	Ore	Wash	B.C.	H.S.	N.B.	Que
SALT-WATER FISH																						
Garfish (Billfish)	4,359	•	-	-	•	10-6	11-6	10-6	11-1	-	-	-	-	-	-	-	-	-	-	-	-	-
Goosefish (Ballyfish)	52,995	10-6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grouper	13,537	9-12	-	-	-	-	-	-	-	-	-	-	-	9-12	-	-	-	-	-	-	-	-
Haddock	14,521,806	1-12	3-8	1-12	•	•	-	1-12	-	-	-	-	-	-	-	-	-	-	-	-	-	•
Hake	1,559,468	1-12	5-11	1-12	•	•	4-1	1-12	3-12	-	-	-	-	-	-	-	-	-	-	-	-	-
Halibut	3,913,299	1-12	•	2-12	-	-	-	-	-	-	-	-	-	-	-	-	•	4-10	4-10	12-4	-	•
Herring: Round	18,220	11-12	-	-	-	-	11-12	-	•	-	-	-	-	-	-	-	-	-	-	-	-	-
Sea (Sardine)	1,856,273	1-12	1-12	5-2	•	•	4-7	-	•	-	-	-	-	-	-	-	-	-	-	-	-	-
" " Nova Scotia	62,237	11-1	-	-	-	-	11-1	-	12-1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hickory shed	43,287	12-3	-	-	-	-	-	-	•	-	12-3	-	-	-	-	-	-	-	-	-	-	-
Jewfish (Wrasse)	39,455	9-6	-	-	-	-	-	-	-	-	-	-	-	9-6	-	-	-	-	-	-	-	-
Kingfish (King mackerel)	848,565	11-4	-	-	-	-	-	-	-	-	-	-	-	11-4	-	-	-	-	-	-	-	-
King whiting (Kingfish)	117,209	1-12	-	-	•	-	5-9	-	5-9	-	•	10-5	-	-	-	-	-	-	-	-	-	-
Launce (Sand eels)	28,360	5-11	-	10-11	-	•	5-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mackerel	11,590,343	3-1	7-12	4-1	6-1	5-10	4-11	4-10	4-11	-	4-9	3-6	-	-	-	-	-	-	-	-	-	-
Menhaden (Bunker)	5,055	•	-	-	•	-	-	-	•	-	-	-	-	-	-	-	-	-	-	-	-	-
Mojarra (Muttonfish)	18,295	1-6	-	-	-	-	-	-	-	-	-	-	-	1-6	-	-	-	-	-	-	-	-
Millet	653,176	1-12	-	-	-	-	•	-	-	•	8-2	-	•	1-12	-	-	-	-	-	-	-	-
Perait	45,515	8-4	-	-	-	-	-	-	-	-	-	-	-	8-4	-	-	-	-	-	-	-	-
Pollock	3,008,550	1-12	1-12	1-12	5-11	•	4-6	4-2	•	-	-	-	-	-	-	-	-	-	-	-	-	•
Pompano	86,394	1-12	-	-	-	-	-	-	-	-	-	-	-	1-12	-	-	-	-	-	-	-	-
Rosefish	21,975	•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

• Small quantities may be received during one or more months of the year.

Receipts of Fresh Fish on the Salt-water Market, New York City, 1901: By Sources of Supply and Seasons (Continued)

Species	Receipts in 1900	All Maine areas	Mass R.I.	Conn	N.Y. Land- ings	N.J.	Del	MD	Va	N.C.	S.C.	Ga.	Fla.	La.	Cal	Ore	Wash	Canada B.C. N.S. N.B. Que
SALT-WATER FISH	Lbs.																	
Salmon	49,028	5-9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5-8 5-9 5-7
Atlantic																		
Chum (Fall)	35,212	10-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10-11 •
King (Chinook)	1,608,732	4-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4-9 • 4-10 4-9
Silver	886,235	2-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5-9 • 2-11 4-9
Scup (Porgy)	8,038,367	1-12	-	5-10 5-10 5-10	5-11 8-5 4-11	-	-	3-7 10-5	-	-	-	-	-	-	-	-	-	-
Sea bass	2,423,758	1-12	-	5-11 5-11 6-11	5-11 11-6 4-12	-	-	4-11 1-12	10-2 10-2	-	-	-	-	-	-	-	-	-
Sea robin	102,701	1-11	-	-	• 8-11 3-11 1-4	•	-	-	-	-	-	-	-	-	-	-	-	-
Sea trout; Gray (Weakfish)	2,103,765	1-12	-	• 6-10 7-9	5-11 1-4 5-11	•	-	5-11 1-12	11-1	-	-	-	-	-	-	-	-	-
Spotted	394,770	1-12	-	-	-	-	-	• 9-12 9-2	-	-	-	-	• 1-12	-	-	-	-	-
Shad	4,304,413	12-7	-	• 5-6	4-7 - 4-6	•	-	3-5 3-5	2-5 2-4 1-4 12-4	-	-	-	-	-	3-4	-	-	5-6
Sharks	51,022	4-12	-	• 4-12	• 6-12	-	-	•	-	-	-	-	-	-	-	-	-	-
Sheepshead	26,585	11-3	-	-	-	-	-	-	•	-	-	-	• 11-3	-	-	-	-	-
Silversides (Spearing)	249,813	3-12	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Skate wings	210,624	1-12	-	1-12	• 1-12 10-6 10-5	-	-	•	-	-	-	-	-	-	-	-	-	-
Smelt	1,311,929	9-4	10-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10-3 9-2 10-2
Snapper, red	191,435	1-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spanish mackerel	1,809,592	10-4	-	-	-	-	-	-	-	•	-	-	-	1-12	-	-	-	-
Spot (Lafayette)	241,405	7-2	-	-	-	8-9	-	7-9	-	-	-	-	-	-	-	-	-	-
Steelhead trout	36,150	9-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Striped bass	1,093,918	1-12	-	5-10 5-10 5-11	1-12 - 11-2	•	-	1-12 10-6	8-5	-	-	-	-	-	-	-	-	-
Sturgeon	60,229	1-10	-	•	-	-	-	• 4-6	-	-	-	-	• 4-10	•	-	-	-	-
Spotfish	348,261	6-9	-	7-9 7-9	• 6-9	• 6-8	-	-	-	-	-	-	-	-	-	-	-	7-9

* Small quantities may be received during one or more months of the year.

Receipts of Fresh Fish on the Salt-water Market, New York City, 1940: By Sources of Supply and Seasons (Continued)

Species	Receipts in 1940	All areas	Maine Mass R.I. Conn.	N.Y. Islands	Del	Va	N.C. S.C. Ga. Fla.	Cal Ore Wash	Canada E.C. N.S. N.R. Que
SALT-WATER FISH	Lbs.								
Tautog (Blackfish)	51,274	5-1	10-1 11-12 *	5-10 - 5-12 -	-	-	-	-	-
Thimble-eyed mackerel	451,082	6-12	7-10 7-10 *	6-11 - 5-12 -	6-9 *	-	-	-	-
Tilefish	530,881	11-7	- - - *	- 11-7 -	-	-	-	-	-
Tomcod	7,404	11-1	* - - -	* - 11-1 -	-	-	-	-	-
Tuna	285,863	6-10	7-9 7-10 *	6-10 - 6-9 -	-	*	-	-	7-8
Whitebait	45,247	3-12	- 4-5 - -	3-12 - -	-	-	-	-	-
White perch	207,796	11-5	- 11-5 *	- 1-5 - 11-5 2-4	11-5 3-5	1-4	-	-	-
Whiting	6,743,777	1-12	- 5-12 5-12	1-12 1-8 9-7 -	*	-	-	-	-
Wolffish (Catfish)	12,729	*	- - - -	- - - -	-	-	-	-	-
FRESH-WATER FISH									
Brook trout	54,045	1-12	- 4-12 1-12 -	6-4 - -	-	-	-	-	-
Carp	131,282	9-7	- - - *	1-7 - *	9-5 9-6	1-5	-	-	-
Catfish & bullheads	105,726	1-12	- - - -	- 11-5 *	1-12 3-5	1-5	-	-	*
Craypie	13,123	9-3	- - - -	- - - -	-	-	9-3	-	-
Yellow perch	24,310	2-5	- - - -	- 3-5 -	*	2-4	-	-	-
SHELLFISH, ETC.									
Clams: Hard	23,663,440	1-12	* 1-12 1-12 *	1-12 - 1-12 *	*	1-12 10-5	-	-	-
Razor	20,590	10-4	- - - -	10-4 - *	-	-	-	-	-
Soft	1,447,290	1-12	1-6 1-12 -	1-12 - 1-12 -	-	-	-	-	-
Soft, shucked	65,936	1-12	* - - -	* - 1-12 -	-	-	-	-	-
Conchs	963,520	1-12	* 1-8 1-12 2-10	1-12 - 1-10 -	*	1-12	-	-	-
Crabs: Hard	1,161,985	4-2	- - - -	5-12 11-12 8-2 *	5-11 4-12	*	-	4-10	-
Oyster	2,679	9-4	- - - -	- - - -	*	9-4	-	-	-
Soft	989,844	4-10	- - - -	- - - -	-	5-10 5-10 4-6 *	-	-	-

* Small quantities may be received during one or more months of the year.

Receipts of Fresh Fish on the Salt-water Market, New York City, 1940: By Sources of Supply and Seasons (Continued)

Species	Receipts in 1940 lbs.	All areas	Maine Mass R.I. Conn	N.Y. Isles	Land- ings	N.J. Del	Mt	Va	M.C. S.C. Ga	Fla	La	Cal Ore Wash	Canada B.C. N.S. N.B. Que
SHALFISH, ETC.													
Crab meat	767,749	1-12	-	-	-	-	1-12	1-12	2-11	3-10	1-12 2-12	•	-
Frog legs	126,978	1-12	-	-	-	-	-	-	-	•	1-12	-	-
Lobsters, common	4,343,949	1-12	1-12	1-12	5-11	-	-	-	-	-	-	-	1-12 1-12
Lobster meat	144,556	5-10	•	-	-	-	-	-	-	-	-	-	5-10 5-10
Lobsters, spiny	9,471	8-4	-	-	-	-	-	-	-	-	8-4	-	-
Lobster meat, spiny	12,437	8-4	-	-	-	-	-	-	-	-	8-4	-	-
Mussels	1,984,125	1-12	•	•	1-12	•	-	-	-	-	-	-	-
Octopus	4,930	10-12	-	-	-	-	-	-	10-12	-	-	•	-
Oysters, shell	10,536,150	9-4	-	•	9-4	9-2	9-12	•	-	-	-	-	-
Oysters, shucked	1,096,192	9-4	-	•	9-4	9-4	9-12	9-4	10-2	-	-	-	-
Periwinkles	67,745	1-12	1-12	-	10-5	•	-	-	-	-	-	-	9-7
Scallops:													
Bay	246,752	7-3	-	10-3	9-11	9-11	-	-	12-2	-	7-3	-	-
Sea	4,382,876	1-12	12-4	1-12	•	1-12	9-12	-	-	-	-	-	1-3
Sea urchins (Sea eggs)	45,860	10-4	-	-	-	-	-	-	-	-	-	-	-
Shrimp	14,544,966	1-12	-	-	-	-	-	-	7-1	5-11	5-2 1-12 1-12	-	-
Squid	1,658,998	4-1	-	5-7	5-7	4-11	10-4	4-1	-	-	-	-	-
Tarrapin	8,102	•	-	-	-	•	-	•	•	•	•	-	-
Turtles, snapping	5,731	•	-	-	•	-	•	•	•	•	-	-	-

• Small quantities may be received during one or more months of the year.

NOTE.--In addition to the varieties listed the receipts from FLORIDA include during one or more months of the year small quantities of amber-jack, blue runner, crevalle (jacks), grunts, snook (sergeantfish), and green turtles; and from NEW YORK swellfish (blowfish), sunfish and snails. In addition to the sources listed other areas ship as follows in small quantities during one or more months of the year unless otherwise noted: ALABAMA - bluefish, red snapper, shrimp and tarrapin; CALIFORNIA, OHIO and MISSOURI - brook trout; MICHIGAN - smelt; MISSISSIPPI and TEXAS - bluefish, shrimp and tarrapin; PENNSYLVANIA - brook trout all year, eels, striped bass, carp and catfish and bullheads; VERMONT - smelt and yellow perch; WISCONSIN - large quantities of smelt from October to April; NEWFOUNDLAND - Atlantic salmon in May and June, smelt from October to January, halibut and lobster meat; ONTARIO - yellow perch; and PRINCE EDWARD ISLAND - smelt from October to March, eels and tomcod.

PUGET SOUND COOPERATIVE FORMED TO HANDLE DOGFISH LIVERS

A cooperative known as the "Otter Trawlers Cooperative Fish Liver Pool" was organized on August 1 and now has a membership including the captains and crews of twenty-nine fishing vessels of the Puget Sound Otter Trawlers Union, according to the Service's Seattle Fishery Market News office. The organization is for the purpose of pooling fares of fish livers and offering the oil for sale in tank car lots to the highest bidder.

A Seattle processing plant was selected to extract the oil from the livers for a percentage of the selling price of the oil. This firm also handles the collection of the livers from the fishing boats, provides cans for the fishermen to pack the livers in, and arranges for the sale of the oil in tank car lots after extraction.

The first carload of dogfish liver oil was completed on September 12, and was sold to an Eastern pharmaceutical firm at a price which netted a return of 30.4 cents per pound to the fishermen members of the pool for the dogfish livers utilized. Prior to the sale of the liver oil the fishermen were advanced 13½ cents per pound by the Seattle plant at the time the livers were landed. During the period from August 1 to September 12 the fishermen outside of the liver pool who sold dogfish livers direct received approximately 18 cents per pound for these livers.

The second tank car of dogfish liver oil produced by members of the fish liver pool was completed and sold on October 11, at a price which netted the fishermen members 46.5 cents per pound for dogfish livers caught off the Washington Coast, and a price of 30.5 cents per pound for livers taken in Puget Sound waters. (Dogfish livers off the Washington Coast contain a higher vitamin A potency than those taken from Puget Sound waters. The offshore dogfish livers are reported to contain as high as 4 million units of vitamin A per pound of liver, while the Puget Sound dogfish livers are much less potent.) Between September 12 and October 11, the price paid the fishermen for the direct sale of dogfish livers averaged about 30 cents per pound for offshore livers and 20 cents for Puget Sound livers.

It is understood that most of the dogfish liver oil is further refined and concentrated by a New York firm using a patented distillation process. On the basis of the most recent figures available the cost of producing a gallon of dogfish liver oil from offshore livers is about \$5.00 for the raw material. A gallon of this oil contains approximately 33 1/3 million units of vitamin A.

DETERMINATION OF PEROXIDE VALUES FOR RANCIDITY IN FISH OILS

Customary peroxide methods for determining rancidity of fish oils are entirely empirical, only a portion of the peroxide reacting with the iodide to liberate iodine, according to a report in the September 1941 Analytical Edition of Industrial and Engineering Chemistry by Maurice E. Stansby, Service technologist at Ketchikan, Alaska. The extent of the reaction depends upon the experimental conditions of the procedure used, such as peroxide concentration present, reaction time, etc. Moreover, with highly unsaturated oils, much of the liberated iodine may be absorbed by the oil.

Some of the factors controlling the reaction have been studied, and it is shown how the empirical nature of this determination can be decreased, and the reaction made more nearly quantitative and less dependent upon experimental conditions by increasing the acidity of the reaction mixture through the addition of strong mineral acids. Several other modifications in the conventional procedures are also suggested to improve precision.

THE DEVELOPMENT OF A PRESERVATIVE FOR GILL NETS

In search for an adequate preservative for gill nets many attempts were made to synthesize a plastic in the fibres of the twine according to the abstract of a report on the subject in the October 1941 issue of the Canadian Journal of Research. The resulting strands in no case possessed such requisite properties as sufficient flexibility and wearing qualities. Strands, treated with a solution of chlorinated pale crepe rubber, to which a plasticizer, dibutyl phthalate, and a bactericide were added, were found, by tensile strength measurements, to prolong the life of the twine in the sea. The strands had the necessary degree of flexibility, and their wearing quality was improved greatly.

Tests made by commercial fishermen on sections of net, treated according to the formula recommended, confirm in large measure the laboratory and sea immersion experiments. They report, among other findings, that the net was easier to handle, remained clean, caught a catch of fish equal to the untreated sections, and that the knots did not slip. The strength of the treated net after a summer's fishing, the fishermen found, was only slightly greater than that of the untreated net. This result was not at all in accord with the laboratory tensile strength measurements made on twine after several weeks of sea immersion. An examination of the knots revealed that this difference is due undoubtedly to the fact that the preservative did not penetrate sufficiently into the knots. Nets are now being manufactured from the treated twine; this is expected to overcome the difficulty and increase considerably the life of the net under fishing conditions.

ROSEFISH AND MACKEREL LANDINGS HEAVY IN OCTOBER

A total of 46,602,000 pounds of fishery products, valued at \$1,560,000 were landed by fishing vessels at the ports of Boston and Gloucester, Mass., and Portland, Maine, during October 1941. This is an increase of 28 percent in volume, and 48 percent in value as compared with the landings during the same month in 1940. Heavy landings of rosefish, 13,945,000 pounds; haddock, 10,240,000 pounds; and mackerel, 7,674,000 pounds; were responsible for the major portion of the gain in the volume of the landings. Receipts of these species accounted for 71 percent of the total landings during the month.

Landings of rosefish during October were the largest for this month since the inception of the fishery. During the first 10 months of the current year, landings of this species amounted to 124,140,000 pounds, valued at \$2,496,000. During the same period in 1940, these landings amounted to 70,242,000 pounds, valued at \$995,000. The catch of rosefish delivered to the three ports in 1940 was the largest in the history of the fishery. Landings of this species during 1941 are expected to show an increase of from 70 to 75 percent as compared with last year, while the value of the catch will probably show a gain for the year of approximately 150 percent.

Total receipts of fishery products at the three ports during the first 10 months of 1941 amounted to 408,256,000 pounds, valued at \$12,771,000. This is an increase of 32 percent in the volume of the landings, and 44 percent in their value as compared with the same period last year.

FISHERIES OF MAINE

Herring catches dropped off considerably during the latter part of October and in mid-November very few fish were being brought to the factories, according to the Service's agent in Maine. The price was better during this period than it has been for some time. Due to the increased costs of packing during the winter and the fact that the majority of the weirs will soon be taken up because of rough weather, most of the canners have given up any desire to pack after November.

It has been unofficially estimated that the Maine pack of sardines may approach 4,000,000 cases. Fewer herring have been smoked in Maine this year because they ran rather small for smoking except during the early part of the season when they were too large. Later the heavy demand for sardines prevented the smokers from getting as steady a supply of fish as usual. A shortage of labor also was encountered at times since both smokers and sardine packers depend to a certain extent upon the same workers. Prices for smoked fish products are higher than they have been for several years.

After a fairly good year lobster fishermen are beginning to take up their traps and catches are dropping off. Maine dealers who sell to Massachusetts lobster buyers, after the first of the year, will have to conform to Massachusetts' new law whereby a lobster of legal size in Maine will not necessarily be of legal size in Massachusetts.

FISHERIES OF MASSACHUSETTS

Rosefish landings at Gloucester have taken a decided drop and wharf workers are again knowing occasional days of complete idleness, the first for many of them for several months according to the Service's marketing agent in that port. Catches from the Gulf of Maine are lighter and the larger boats of the fleet are reluctant to fish on the Cape shore of Nova Scotia, due in part to the fact that the 8-inch limit on rosefish makes it necessary to cull extensively the smaller Nova Scotia fish. This increases the length of the trip and cuts down the size of the catch. Rosefish were selling at \$2.10 per hundred pounds in Gloucester and the fishermen were still laying over 4 days between trips.

In mid-November the Gloucester dragger fleet was searching for the usual fall run of pollock off Cape Cod but catches had been light. Catches of pollock by the gill net fleet were moderately heavy with the supply fairly constant. Individual boats in the fleet averaged about 9,000 pounds daily in the first part of November and the latter part of October. Prices were relatively high, ranging from \$2.40 to \$3.80 per 100 pounds. However, they probably will fall off sharply if the draggers find any large body of pollock. Pollock livers from the gillnet boats are selling for \$14 a barrel, a considerable source of revenue since every 2,000 pounds of pollock averages about a barrel of livers.

Mackerel fishing out of Gloucester has been exceptional during the fall. Large catches of small fish have been landed by the fleet with some fares going as high as 100,000 pounds. In mid-November the large body of small fish appeared to be gone and the fleet was fishing at night taking small fares of large fish which were selling for good prices.

FISHERIES OF NEW YORK

Flounders, the principal catch of Peconic Bay draggers, have been quite plentiful and the average price 3 to 4 cents higher than in 1940, according to the mid-November report of the Service's marketing agent on Long Island. October was reported the best month for flounders in the past 10 years. The catch of porgies in Gardner's Bay by draggers was below 1940 but offset by higher prices. Pound nets produced about 5 percent less but steady prices made the financial returns comparable to 1940. During the fall months there was a heavy run of squid when the price was 7 cents per pound.

There has been a great decrease among line trawlers at Montauk and there has not been a good cod season for 7 years. Otter trawlers have had a successful season with yellow-tails being plentiful and prices favorable. The fluke season was excellent with good catches being made along the entire southern shore as far west as Shinnecock Inlet. The fluke boats also took large numbers of lobsters, the majority being of the "jumbo" size. Striped bass were abundant off Montauk Point in October. Sea bass were plentiful in 1941, probably the best year in the last six.

FISHERIES OF THE SOUTH ATLANTIC STATES

With the coming of cold weather the heavy run of spot came to an end in North Carolina, according to the Service's marketing agent in that State. During eight weeks of the season, Atlantic, Beaufort, and Morehead City dealers handled a greater volume of spot than ever before. Labor was scarce and many plants were forced to operate nights during the run. It is estimated that about 6,000,000 pounds were landed in Carteret County alone. The bulk of the catch was large and of good firm quality. The price to fishermen remained at around two cents per pound.

In mid-November the demand for oysters was good but the production was below normal and the yield poor.

Crabs were plentiful, normal in size and quality, and a satisfactory season is anticipated if sufficient labor and crabbers are obtainable.

HOLDINGS OF FROZEN SHRIMP AND SHRIMP MEAT INCREASE IN GULF STATES

Holdings of frozen shrimp in 9 Gulf warehouses in Alabama, Mississippi, Louisiana, and Texas amounted to 4,251,000 pounds on November 20 as compared with 3,172,000 pounds a year ago, according to the Service's New Orleans Market News office. Most of the shrimp is placed in 5-pound cartons and frozen and glazed while in the cartons. Some is pan-frozen and glazed before packing in cartons. One firm freezes shrimp individually as they are conveyed through a tunnel and packs them in 20 and 40 pound cartons. Another freezes the shrimp after mechanically "deveining" them. All shrimp are frozen with the heads removed except where local preference requires whole shrimp. In New Orleans, for example, a small quantity is frozen with heads on in 20 pound tomato boxes (lugs) for use when fresh whole shrimp are scarce.

During the present season there has been a large increase in the frozen stocks of fresh-cooked shrimp meat in the Gulf area. The cooked and peeled shrimp are usually packed in 5-pound tins and frozen without glazing. Considerable amounts already have been shipped but over 100,000 pounds are now in storage.

RECEIPTS OF FISHERY PRODUCTS IN CHICAGO CONTINUE GAIN

Increases in receipts of fresh-water fish and shellfish enabled Chicago's wholesale market to handle an 18 percent larger poundage in October than during September and to maintain the 12 percent increase in receipts over the first ten months in 1940. Shrimp from Louisiana and sauger from Manitoba entered the market in much larger quantities than during September while shipments of frozen rosefish fillets dropped.

Receipts of Fishery Products at Chicago

Item	October 1941	Oct. 1941 compared with		10 months Jan. - Oct. 1941	10 mo. 1941 com- pared with 10 mo. 1940
Classification:	Pounds	Percent	Percent	Pounds	Percent
Fresh-water fish	2,788,000	+ 18	- 7	28,010,000	+10
Salt-water fish	2,078,000	0	+ 49	17,458,000	+28
Shellfish, etc.	1,452,000	+ 56	- 9	7,765,000	- 9
Total receipts	6,318,000	+ 18	+ 5	53,233,000	+12
Leading items:*					
Lake trout	568,000	+ 1	- 27	4,995,000	+ 3
Sauger	485,000	+ 56	+119	4,276,000	+49
Whitefish	290,000	+ 12	- 34	3,186,000	- 8
Yellow perch	247,000	- 6	- 21	2,961,000	+21
Yellow pike	157,000	- 22	- 16	1,605,000	- 1
Halibut	979,000	+ 14	+ 28	6,868,000	+ 4
Rosefish fillets	271,000	- 43	+ 55	3,910,000	+34
Shrimp	1,053,000	+ 47	- 12	5,056,000	-13
Leading sources:					
Louisiana	587,000	+113	- 34	3,136,000	-36
Massachusetts	640,000	- 31	+ 57	7,558,000	+56
Michigan	507,000	+ 36	- 36	5,054,000	-18
Wisconsin	458,000	- 21	- 1	6,476,000	+ 7
British Columbia	858,000	+ 2	+ 35	7,031,000	+ 4
Manitoba	666,000	+ 36	+ 98	6,268,000	+46
Domestic total	4,316,000	+ 16	- 5	36,357,000	+ 9
Imported total	2,002,000	+ 20	+ 38	16,876,000	+17
Transported by:					
Truck	2,065,000	+ 6	- 2	20,954,000	+28
Express	1,309,000	- 28	- 29	13,931,000	-17
Freight	2,944,000	+ 84	+ 44	18,348,000	+25

* Includes fresh and frozen fish.

FISHERIES OF MISSISSIPPI

Although the production of shrimp and crabs in Mississippi this season has been somewhat better than during 1940 and prices have remained fairly good, there has been a serious shortage of oysters, fish, and the labor with which to prepare these products for the market, according to the Service's marketing agent in that State. Since there has not been an adequate supply of oysters on the public reefs, many of the oystermen have gone to work in ship yards at various points on the Gulf. The supply of shrimp has been good, the size large, and the price above normal. Late in October a run of large shrimp appeared off Horn and Ship Islands and lasted well into November. Catches from this unusual run were excellent considering the time of the year and the size of the shrimp.

Crabs were plentiful during 1941 and prices were so good that old crabbers said it was the best summer they had ever experienced. Live crabs were 2 cents per pound until August when the price advanced to 2½ cents with the diminished production in Louisiana.

All varieties of fish have been scarce during 1941. Mississippi mullet supplied to inland areas met considerable competition with mullet from Florida and croakers from Virginia. During the past two years a number of truckers have specialized in a retail fish trade operating from Gulf points to northern Mississippi. They carry mainly white trout, mullet, and oysters on trips that usually are three days long although some may take as long as a week. Red drum (redfish) have been scarce although they appeared somewhat more abundant during May and June but were smaller than a few years ago. Menhaden were in good supply at the beginning of the season but were both scarce and lean at the end.

FISHERIES OF THE GREAT LAKES

The Michigan waters of Lake Michigan produced 9,299,000 pounds of fish during 1940, an increase of 712,000 pounds over the 1939 catch, according to the Service's agent in the Great Lakes region. There was little change in the production of trout, herring, suckers and whitefish. The catch of chubs and yellow perch declined considerably. The production of smelt increased fourfold, accounting for practically all of the gain. If the present rate of increase in smelt production continues this species will be first in volume in 1941.

Fishermen report seeing many small trout and weekly catches of one company were running 1,000 pounds higher than during the same period in 1940. The larger catch was being taken with fewer boats and less gear because of the shortage of labor.

There is no commercial production of smelt on the east shore of Lake Michigan because the price is very low when the smelt begin to run since Green Bay has been in production for some time and the market is usually well supplied.

During the season of heavy trout fishing around Charlevoix a profitable byproduct has been developed in the cheek meat which is cut out of the trout heads and smoked.

The Michigan waters of Lake Huron produced 9,298,000 pounds of fish during 1940, over 4,000,000 pounds less than the 1939 catch. The herring production suffered the greatest decrease, a decline of practically one-half. The catch of yellow pike, suckers and carp remained about the same but lake trout and whitefish both declined appreciably. Most of the total decrease can be attributed to the severe storm of November 11, 1940, which came just at the start of the herring and trout season and damaged netting to so great an extent that the fish were gone before the nets could be repaired.

Smelt are not produced commercially in Lake Huron, although they are available in Saginaw Bay in great quantities merely for the taking. They are becoming more abundant every year according to the fishermen and have increased 300 percent in outer Lake Huron and 1,000 percent in Saginaw Bay. The fishermen's estimates are based on their catch of smelt in gill nets while fishing for other varieties.

In Detroit dealers reported that the high prices and low production of many of the cheaper species of lake fish during the past season had brought about the use of more marine fish on all inland markets. The limited herring fishing on Lake Huron has made it difficult for dealers to secure fresh stocks during the past two years.

FISHERIES OF WASHINGTON

A new price scale was agreed upon for otter-trawl fish by Seattle wholesale dealers and the Otter-Trawlers Union, according to the Service's Market News office. The new price schedule provides for an increase of 1 cent per pound for petralie "sole", sablefish, and true cod; and 3 cents per pound for "lingcod".

The tremendous activity in the fisheries for dogfish and soupfin sharks, primarily for their livers, which began in October, continued during November. On October 21, halibut fleet vessels started listing dogfish and soupfin shark livers on the board of the Seattle Fish Exchange to be sold by competitive bidding in the same manner as halibut fleet fares. This practice was followed during November, with prices paid for soupfin shark livers ranging between \$7.50 and \$9.00 per pound until November 13. During this period prices paid for dogfish livers ranged between 40 and 50 cents per pound. On November 15 there was a weakening note in the liver market and Exchange prices dropped to \$6.50 for soupfin shark livers and 35 cents for dogfish livers. During the balance of November the prices paid over the Exchange fluctuated between \$5.50 and \$6.00 per pound for soupfin shark livers, and 25 to 35 cents per pound for dogfish livers.

During October soupfin shark deliveries to Seattle totaled 20,607 pounds for which the fishermen received \$146,251, or an average of \$7.10 per pound. In addition there were 405,257 pounds of dogfish livers sold by the fishermen in Seattle for which they received \$151,200. The returns received by the fishermen for the sale of fish livers during October far exceeded the value of any single item of fish or shellfish, and were approximately 50 percent of the total value of all fish receipts. On November 5, a record halibut vessel delivery of fish livers occurred at Seattle when one craft delivered a \$12,000 trip of soupfin shark and dogfish livers after less than two weeks of fishing. The crew shared over \$1,800 per man, which is believed to be the largest share for any single halibut fleet delivery since records have been available.

On November 1 seven Seattle firms were purchasing fish livers.

SHARKS MOST IMPORTANT SOURCE OF FISH LIVERS IN CUBA

Sharks are reported to be the main source of fish livers (of any commercial importance) in Cuba, according to "Foreign Commerce Weekly". These are exported to the United States for the most part, though a small quantity is consumed locally in the production of oil for use in the domestic paint industry and for export.

Exports of shark livers in brine during 1940 totaled 12,013 kilograms, valued at \$1,166, the United States receiving the full amount, according to Cuban official statistics. Consular-invoice declarations show that, during the period January to September 1941, exports of this commodity through Habana to the United States amounted to 34,155 kilograms, valued at \$14,917.

FROZEN FISH TRADE

Holdings of Frozen Fish Reach New High

Holdings of frozen fishery products in United States and Alaskan cold-storage plants increased to 115,445,000 pounds on November 15, an advance of 7,871,000 pounds during the month. Stocks of frozen fish and shellfish on this date were over 15,000,000 pounds greater

than the 100,088,000 pounds in storage on December 15, 1940, which were the largest holdings reported in any previous year. In each of the past three months a new record for the domestic holdings of frozen fish has been established. Supplies of frozen fishery products on hand on November 15 were 18 percent above those on the same date last year and were 29 percent greater than the average holdings in storage on this date in the previous five years.

The principal items held on November 15 were halibut, 13,396,000 pounds; whiting, 12,035,000 pounds; salmon, 11,770,000 pounds; and haddock fillets, 10,068,000 pounds. These items accounted for 41 percent of the total volume of fishery products in storage. Increased holdings of croakers, haddock, and rosefish fillets, whiting and shrimp accounted for the major portion of the 17,914,000 pound gain in the November 15 holdings of frozen fish, as compared with the same date last year.

Supplies of cured herring held in domestic cold-storage plants on November 15, which consisted principally of imported fish, amounted to 11,978,000 pounds--45 percent under the quantity in storage on the same date in 1940. However, stocks of mild-cured salmon, which are of domestic origin, totaled 7,574,000 pounds, an increase of 13 percent.

Holdings of Fishery Products in the United States ^{1/}

Item	Nov. 15 1941	Nov. 15 compared with			Oct. 15 1941	Nov. 15 1940	5-yr. av. Nov. 15
		Oct. 15 1941	Nov. 15 1940	5-yr. av. Nov. 15			
	Pounds	Percent	Percent	Percent	Pounds	Pounds	Pounds
Frozen fish and shellfish:							
Total holdings	115,445,000	+ 7	+ 18	+ 29	107,574,000	97,531,000	89,186,000
Important items:							
Croakers	3,831,000	- 7	+194	+170	4,119,000	1,303,000	1,417,000
Cod fillets	3,224,000	+ 39	+ 20	+ 60	2,312,000	2,681,000	2,020,000
Haddock fillets	10,068,000	- 14	+ 30	+ 34	11,684,000	7,716,000	7,516,000
Pollock fillets	2,207,000	+643	+ 4	+ 3	297,000	2,131,000	2,144,000
Rosefish fillets	5,243,000	+ 10	+253	(2)	4,781,000	1,485,000	(2)
Flounders	1,488,000	- 6	+ 53	+130	1,590,000	971,000	648,000
Halibut	13,396,000	- 13	+ 8	+ 23	15,449,000	12,409,000	10,885,000
Mackerel	8,495,000	+ 25	- 5	+ 49	6,797,000	8,981,000	5,697,000
Mullet	1,582,000	+ 38	(2)	(2)	1,148,000	(2)	(2)
Sablefish	1,928,000	+ 29	- 38	- 22	1,499,000	3,089,000	2,475,000
Salmon	11,770,000	+ 15	(3)	(3)	10,221,000	11,789,000	11,741,000
Whiting	12,035,000	- 9	+ 18	+ 17	13,208,000	10,231,000	10,322,000
Whitefish	1,543,000	- 6	- 35	+ 7	1,647,000	2,373,000	1,436,000
Scallops	1,479,000	- 6	- 20	(2)	1,571,000	1,848,000	(2)
Shrimp	7,302,000	+ 89	+ 26	(2)	3,854,000	5,801,000	(2)
Cured fish:							
Herring, cured	11,978,000	- 19	- 45	- 28	14,738,000	21,608,000	16,612,000
Salmon, mild-cured	7,574,000	- 10	+ 13	- 1	8,427,000	6,689,000	7,636,000

^{1/} Data furnished by the Agricultural Marketing Service, Department of Agriculture.

^{2/} Data not available.

^{3/} An increase or decrease of less than one-half of one percent.

Freezing of Fishery Products Greatest in History

The freezing of fishery products by domestic cold-storage plants continued above normal for the month ended November 15. The 29,356,000 pounds of fish and shellfish frozen during this period was 32 percent greater than the volume frozen in the same month last year and 40 percent above the average poundage frozen during the months ending on this date in the previous five years. Unusually heavy freezings of pollock and rosefish fillets, mackerel, whiting and shrimp accounted for the major portion of the production during the month.

In the first 11 months of the current year, domestic plants froze 224,865,000 pounds of fishery products, an increase of 25 percent as compared with the same period last year. This is nearly 29,000,000 pounds greater than the total poundage frozen in any previous year. It is thus apparent that the record production of frozen fish and shellfish, amounting to 196,155,000 pounds, which was established in 1940, will be topped by about 25 percent during the current year. A comparison of the poundage of fishery products frozen during 1941 with similar data for the period from 1920 to 1940, shows that in 8 of the first 11 months of the current year new records were established for the domestic production of frozen fish and shellfish.

Freezings of Fishery Products in United States Cold-storage Plants ^{1/}
(Figures are for the month ending on the date indicated)

Item	Nov. 15 compared with						
	Nov. 15 1941	Oct. 15 1941	Nov. 15 1940	5-yr. av. Nov. 15	Oct. 15 1941	Nov. 15 1940	5-yr. av. Nov. 15
	Pounds	Percent	Percent	Percent	Pounds	Pounds	Pounds
Total fish and shellfish	29,356,000	+ 8	+ 32	+ 40	27,226,000	22,190,000	20,923,000
Important items:							
Cod fillets	1,005,000	+309	+ 33	+ 56	246,000	755,000	643,000
Haddock fillets	888,000	- 65	+ 13	- 10	2,504,000	783,000	990,000
Pollock fillets	2,694,000	+372	+ 20	+ 31	571,000	2,239,000	2,060,000
Rosefish fillets	3,494,000	+ 6	+117	(2)	3,301,000	1,612,000	(2)
Mackerel	2,957,000	+ 17	+145	+341	2,522,000	1,206,000	670,000
Sablefish	902,000	- 23	- 29	- 9	1,165,000	1,264,000	996,000
Salmon	2,985,000	+ 6	+ 25	- 6	2,816,000	2,391,000	3,185,000
Whiting	2,368,000	- 22	+ 70	+110	3,029,000	1,396,000	1,126,000
Shrimp	4,795,000	+ 65	+ 55	(2)	2,912,000	3,102,000	(2)

^{1/} Data furnished by the Agricultural Marketing Service, Department of Agriculture.

^{2/} Data not available.

Boston Cold-storage Holdings Over 20 Million Pounds

With holdings nearing 21 million pounds on November 26, the cold storage warehouses in Boston increased their stocks one-third since October 29 and held 13 percent more fishery products than a year ago, according to the Service's Boston Market News office. Increases in pollock and cod holdings were particularly marked.

Holdings of frozen whiting in 15 plants in Maine and Massachusetts totaled 8,015,000 pounds on November 15, only nominally greater than a month previous. However, dressed, H & G, fillets and skuljoes had decreased from 6,093,000 pounds to 4,875,000 pounds while round whiting had increased from 1,852,000 pounds to 3,083,000 pounds.

Boston Cold-storage Holdings

Item	Nov. 26, 1941	Nov. 26 compared with		Oct. 29, 1941	Nov. 27, 1940
		Oct. 29, 1941	Nov. 27, 1940		
	Pounds	Percent	Percent	Pounds	Pounds
Total fish and shellfish	20,770,000	+ 33	+ 13	15,640,000	18,369,000
Leading items:					
Fillets:					
Cod	1,212,000	+199	- 29	406,000	1,714,000
Haddock	4,094,000	+ 5	+ 20	3,886,000	3,405,000
Pollock	1,563,000	+682	- 18	200,000	1,914,000
Rosefish	528,000	- 5	+121	554,000	239,000
Mackerel	3,531,000	+ 2	- 29	3,466,000	4,987,000
Scallops	459,000	+ 30	- 18	353,000	561,000

New York City Cold-Storage Holdings More Than 11 Million Pounds

New York's cold-storage warehouses kept pace with the general increase in frozen stocks throughout the country and on November 27 reported 14 percent greater stocks than a month earlier, according to the Service's local Market News office. Gains were greatest among salt-water species, particularly butterfish, halibut, and salmon.

New York Cold-storage Holdings

Item	Nov. 27, 1941	Nov. 27 compared with		Oct. 30, 1941	Nov. 28, 1940
		Oct. 30, 1941	Nov. 28, 1940		
	Pounds	Percent	Percent	Pounds	Pounds
Total fish and shellfish	11,261,000	+14	+ 7	9,835,000	10,488,000
Leading items:					
Butterfish	750,000	+46	+ 78	512,000	421,000
Halibut	573,000	+66	+137	346,000	242,000
Mackerel	960,000	- 8	- 7	1,038,000	1,027,000
Salmon, king (chinook)	548,000	+34	- 28	409,000	763,000
Yellow perch	789,000	+ 2	- 60	774,000	1,973,000
Shrimp	1,090,000	+18	+ 1	924,000	1,079,000

Chicago Cold-storage Holdings Increase 31 Percent in November

Frozen fishery products in Chicago's cold-storage warehouses totaled well over 6 million pounds on November 27, almost a third larger than four weeks earlier and 25 percent greater than a year ago. Holdings of shrimp, the largest individual item, passed 1 million pounds, according to the Service's Market News office in Chicago.

Chicago Cold-storage Holdings

Item	Nov. 27, 1941	Nov. 27 compared with		Oct. 30, 1941	Nov. 28, 1940
		Oct. 30, 1941	Nov. 28, 1940		
	Pounds	Percent	Percent	Pounds	Pounds
Total fish and shellfish	6,335,000	+ 31	+ 25	4,823,000	5,072,000
Leading items:					
Blue pike and sauger	268,000	+ 34	+277	200,000	71,000
Lake herring and chubs	266,000	+422	- 33	51,000	395,000
Lake trout	592,000	+ 61	- 11	368,000	667,000
Smelt	320,000	- 15	+ 25	375,000	256,000
Rosefish fillets	374,000	- 23	+199	486,000	125,000
Halibut	607,000	+ 81	+ 5	335,000	578,000
Whiting	236,000	+ 10	+109	214,000	113,000
Shrimp	1,026,000	+126	+ 28	453,000	799,000

Canadian Cold-storage Holdings Total 32,368,000 Pounds

Canadian cold-storage plants held 32,368,000 pounds of frozen fresh fish and shellfish on December 1, according to information released by the Dominion Bureau of Statistics. In contrast to the record holdings of frozen fish in the United States and Alaska, Canadian stocks on December 1 were 12 percent less than those on the same date in 1940, and 8 percent less than the holdings on November 1 of the current year.

The principal items of frozen fresh fish held in Canada on December 1 were salmon, 8,321,000 pounds; sea herring, 6,344,000 pounds; halibut, 5,629,000 pounds; cod fillets, 2,177,000 pounds; and whitefish, 876,000 pounds. Each of these items except halibut and whitefish showed a marked decline as compared with a year ago.

Stocks of frozen smoked fish in Canadian plants on December 1 totaled 2,832,000 pounds. Two items accounted for 82 percent of the holdings. These were frozen groundfish fillets, 1,423,000 pounds; and sea herring kippers, 911,000 pounds.

Canadian freezers froze 4,873,000 pounds of fresh fish during November--27 percent less than the poundage frozen during the same month in 1940. The principal items frozen during the month were cod fillets, 1,389,000 pounds; salmon, 1,022,000 pounds; and sea herring, 872,000 pounds. Reduced freezings of salmon during November, which were over 1 million pounds less than the volume frozen in the same month last year, accounted for the major portion of the decline.

A total of 1,153,000 pounds of smoked fish was placed in Canadian cold-storage plants during November, an increase of 110,000 pounds as compared with the same month last year. The principal items comprising this total were frozen smoked groundfish fillets, 749,000 pounds; finnan haddie, 227,000 pounds; and sea herring kippers, 126,000 pounds.

CANNED FISH TRADE

Unsold Stocks of Canned Salmon Under 1 Million Cases

On November 30 the unsold stocks of 87 companies, representing 99 percent of the domestic canned salmon pack, totaled 976,980 standard cases, according to the Association of Pacific Fisheries. Holdings of coho or silver salmon in packer's hands were negligible, and of the record pink pack canners still held only 573,897 cases.

Canned Salmon Unsold--Standard Cases

Item	November 30, 1941	October 31, 1941	November 30, 1940
Chinook or king	118,396	112,283	97,880
Puget Sound Sockeye	46,219	47,231	41,687
Alaska red	89,419	102,232	255,315
Coho, silver, and medium red	1/ 6,745	1/ 6,194	200,188
Pink	573,897	746,618	407,264
Chum	135,651	131,074	60,741
Blueback	717	6,877	572
Steelhead	5,936	5,067	8,084
Total	976,980	1,157,576	1,071,731

1/ Does not include coho tails.

Canned Salmon Prices Maintain Level

Canned salmon quotations reported to the Service's Seattle Fishery Market News office on December 1 were practically unchanged from October and November, but well above last year. Some of the items quoted below are no longer available, the prices listed being the last known to have been paid. Quotations are f.o.b. Pacific Coast shipping points.

Canned Salmon Quotations--Per Dozen Cans

Variety	Can size	Dec. 1, 1941	Dec. 1, 1940
Chinook or king, Columbia River	1-lb. fancy flat	\$4.50-4.60	\$3.85
	$\frac{1}{2}$ -lb. fancy flat	2.60	2.25
Alaska red	1-lb. tall	3.50-3.70	2.50-2.65
	1-lb. flat	3.70	2.70-2.75
	$\frac{1}{2}$ -lb. flat	-	1.65-1.75
Coho and medium red	1-lb. tall	2.50	1.85-2.10
	1-lb. flat	3.00	2.00-2.35
	$\frac{1}{2}$ -lb. flat	1.75-1.85	1.20-1.35
Chum	1-lb. tall	1.70	1.30-1.35
	$\frac{1}{2}$ -lb. flat	1.10-1.15	.90
Pink	1-lb. tall	1.75	1.45-1.50
	1-lb. flat	1.90-2.00	1.65
	$\frac{1}{2}$ -lb. flat	1.20-1.25	.95
Puget Sound sockeye	1-lb. flat	4.00-4.50	3.65-3.70
	$\frac{1}{2}$ -lb. flat	2.50	2.10-2.25

British Columbia Salmon Pack a Record

On November 29 the British Columbia salmon pack amounted to 2,242,000 standard cases, a record total according to the report of the Chief Supervisor of Fisheries, Vancouver. Packs of chum salmon and silver salmon were particularly heavy, 918,000 cases and 391,000 cases respectively. The quantities canned of the remaining varieties were red salmon 455,000 cases, pink salmon 428,000 cases and king salmon 50,000 cases. The total 1940 pack was 1,444,000 cases and the average for the five years from 1936 to 1940 1,615,000 cases.

Columbia River Salmon Pack Slightly Over 400,000 Cases

The Columbia River chinook salmon run during September 1941 set an all time record, according to Oregon reports, the catch totaling more than 13 million pounds, an increase of 146 percent over the previous high catch of 5,294,000 pounds in 1940. The total chinook catch during 1941 amounted to almost 22 $\frac{1}{2}$ million pounds, 69 percent greater than the previous year and 53 percent over the five-year average.

The canned pack on the Columbia River to November 15 amounted to 407,000 standard cases according to estimates supplied by the trade to the ASTORIAN BUDGET. The pack during the comparable period in 1940 was 398,000 cases and in 1937, 417,000 cases. The current pack consists of chinook salmon 274,000 cases, chum salmon 82,000 cases, silver salmon 10,000 cases, blueback salmon 7,000 cases and steelhead trout 34,000 cases.

Shrimp Canneries Pack 165,000 Cases in November

The pack of canned shrimp by canneries operating under the Seafood Inspection Service of the Food and Drug Administration increased about 165,000 standard cases in November to a total of 616,000 cases on November 29, according to the Service's New Orleans Market News office. Since the start of the season on July 1 the pack has been at a lower level than during recent years and now is about 250,000 cases below the 5-year average. The final pack during the last five seasons averaged 1,036,000 cases.

Canned shrimp quotations on December 1 were from 5 cents to 15 cents higher per dozen for the wet pack and 10 cents to 20 cents higher for the dry pack than they were on November 1. A number of packers reported that they had not re-entered the market on December 1. The quotations following are f.o.b. point of production in No. 1, plain, tall tins.

Canned Shrimp Prices--Per Dozen Tins

Item	December 1, 1941	November 1, 1941	December 1, 1940
WET PACK			
Small	\$1.70-1.95, few 1.65	\$1.60-1.80	\$1.05-1.15
Medium	1.80-2.05, few 1.75	1.70-1.90	1.10-1.20
Large	1.90-2.15, few 1.85	1.85-2.00	1.15-1.25
Extra Large or Jumbo	2.00-2.25, few 1.95-2.35	1.95-2.15, few 2.25	1.20-1.30
DRY PACK			
Small	\$1.75-1.95	\$1.60-1.75	\$1.05-1.15
Medium	1.85-2.05	1.70-1.85	1.10-1.20
Large	1.95-2.15	1.85-1.95	1.15-1.25
Extra Large or Jumbo	2.15-2.25	1.95-2.15, few 2.25	1.20-1.30

California Sardine Pack Nearly 4 Million Cases

Landings of over 33,000 tons of sardines in California during the last week in November brought the season's total production to 482,000 tons, more than double that of last year for the same period according to a report of the California Sardine Products Institute. Both the pack of canned sardines and the output of meal and oil are far in advance of last year's production which was handicapped by a late start.

Brokers reported to the Service's Seattle Market News office that sardine meal on December 1 was quoted at \$60 per ton as against \$47.50 on the same date last year and sardine oil was reported to be priced at 60 cents per gallon as compared with 38 cents.

California Sardine Landings, Canned Pack, and Byproducts

Item	Unit	Season to --	
		Nov. 28, 1941	Nov. 29, 1941
Landings	Tons	481,846	231,673
Canned sardines (48 lbs.)	Std. cases	3,947,380	1,294,247
		Oct. 31, 1941	Oct. 31, 1940
Meal	Tons	51,337	16,329
Oil	Gals.	11,048,314	4,124,131

Packs of Canned Tuna and Mackerel Decline

Data on the California pack of canned tuna and tunalike fishes during the first 10 months of 1941 indicate that the current year's production of these fish will be far below the record pack canned in 1940, according to the California Bureau of Marine Fisheries. The October production of 347,000 standard cases, which was 9,000 cases less than the amount canned in the same month in 1940, raised the 10-month total for the year to 2,532,000 cases--26 percent less than the volume packed during the same period in 1940. Although it is expected that the 1941 production of canned tuna in California will show a considerable decline as compared with last year, the pack will be among the largest in the history of the fishery. It is anticipated that only 2 or possibly 3 previous years will show a larger production. These were 1940, when the total California pack amounted to 3,975,000 cases; 1939, with 3,421,000 cases; and possibly 1937 when 3,145,000 cases were canned.

A total of 234,000 standard cases of mackerel was canned in California during October, a decline of 40 percent as compared with the same month last year, according to the Bureau. In the first 10 months of the current year the pack of this species, which totaled 614,000 cases, was one-third less than the quantity packed during the same period in 1940.

California Pack of Tuna and Mackerel--Standard Cases 1/

Item	October,	October,	Ten months ending with October	
	1941	1940	1941	1940
	Cases	Cases	Cases	Cases
Tuna:				
Albacore	4,000	5,000	103,000	152,000
Bonito	2,000	14,000	218,000	103,000
Bluefin	1,000	1,000	177,000	328,000
Striped	61,000	139,000	384,000	709,000
Yellowfin	155,000	162,000	1,205,000	1,708,000
Yellowtail	8,000	2,000	151,000	76,000
Flakes	116,000	18,000	257,000	184,000
Tonno style	-	15,000	37,000	177,000
Total	347,000	356,000	2,532,000	3,436,000
Mackerel	234,000	388,000	614,000	914,000

1/ Standard cases of tuna represent cases of 24 $\frac{1}{2}$ -pound cans each, while those of mackerel represent cases of 48 1-pound cans.

British Columbia's 1941 Fall Canned Herring Pack 750,000 Cases on November 29

On November 29 the landings of herring in British Columbia for the 1941 fall season were 36,272 tons as compared with 44,227 tons for the same period a year ago, according to the Chief Supervisor of Fisheries, Vancouver, B. C. Almost 750,000 standard cases of herring have been packed this year, well ahead of last year's comparable figure--431,000 cases--when over 5,000 tons were dry-salted and a larger portion of the catch diverted to reduction plants. The herring run in the Gulf of Georgia has been so heavy that the original quota of 30,000 tons has been increased to 33,500 tons.

The British Government is reported willing to purchase 5,000 long tons of canned herring--about 233,000 cases--in addition to the 1,600,000 cases originally ordered, according to the American Vice-Consul at Vancouver. The price offered is \$3.55 per case--25 cents above the price for the initial order--and is contingent upon the packers being able to furnish the tomato sauce required. For the original order the British Government supplied the sauce, procuring it from the United States under the Lend-Lease Act.

FOREIGN FISHERY TRADE

Import and Export Figures to be Withheld

Foreign trade statistics covering our imports and exports will not be released to the public until further notice.

WHOLESALE AND RETAIL PRICES

On November 29 wholesale prices were 0.8 percent higher than on November 1 and 15.8 percent higher than a year ago, according to the Bureau of Labor Statistics. At 92.3 percent of the 1926 level the index of 900 price series was equal to the 11-year peak reached in mid-November.

The continuous rise in retail food prices during the past year was not maintained during the last two weeks in November, according to a check on 18 foods in 19 cities. Although some items advanced moderately the net trend was downward. Pink salmon increased 0.1 percent in price.

THE CHEMISTRY OF MENHADEN OIL

Component Fatty Acids

Oils of domestic origin are becoming more important by reason of the increasing inability to import foreign oils, according to a report in the September 1941 Analytical Edition of Industrial and Engineering Chemistry, by W. H. Baldwin and W. B. Lanham, Jr., Service technologists at College Park, Maryland. Marine oils in particular are available in large quantities and should be given serious consideration as replacements for foreign materials. Because much of the chemistry of marine oils is still unknown, menhaden oil--the most abundant of the Atlantic Coast marine oils--was examined by the ester fractionation procedure. It was found that menhaden oil, differing from vegetable oils, was composed of fatty acids having a rather high molecular weight and some also with a high degree of unsaturation.

THE COD FISHERIES: THE HISTORY OF AN INTERNATIONAL ECONOMY

By Harold A. Innis

Yale University Press, New Haven, Connecticut, 1940
and

The Ryerson Press, Toronto, Canada, 1940. Pp. XV, 520. \$3.50

This volume is one of a series entitled The Relationship of Canada and the United States prepared under the direction of the Carnegie Endowment for International Peace. About 30 volumes are contemplated and over a dozen have been published.

The historic importance of North America's cod fishery in the northeastern maritime region began with the inception of the fishery after John Cabot's voyage of discovery in 1497 when "the sea there is swarming with fish, which can be taken not only with the net but in baskets let down with a stone". The foundation of the region's economic development was the fishing industry and cod was the staple fish.

France, Spain, Portugal, England, Nova Scotia, Newfoundland and New England pursue Gadus callarias Linnaeus with varying fortune throughout the years. For nearly four and one-half centuries the economic significance of the cod fishery is developed by the author

in detail from voluminous historical records. Letters, logbooks and commercial documents are excerpted and examined. Treaties and trade agreements are quoted and their effects on the fishery and the economies of the contesting regions judged.

The fishery is affected by many things--geographical position, commercial initiative, supplies of salt, the market for sugar, war, slavery, bounties, duties, tariffs, free trade, the mechanization of the industry, and the growing fresh and frozen fish trade. All are utilized to the utmost by the regions battling to maintain their footholds, develop their industries and expand their markets.

The work abounds with historical references to the ever-changing pattern of the fisheries--the opening of new grounds, the introduction of new gear and methods, fishing rights, and the success and failure of pioneering enterprises. Through it all the author's effort to reveal "the significance of the fishing industry for the economic, political and social organization of North America and Europe" succeeds admirably.

A. W. Anderson
Fish and Wildlife Service.

THE COVER PAGE

The beautiful monument on the cover page is located directly across the Potomac River from Washington on Columbia Island, only a few steps from the Mt. Vernon Memorial Highway.

The inscription on the monument dedicates it as a memorial to all our seafarers in the following words:

To
the strong souls and ready valor
of those men of
the United States
who in the Navy, the Merchant Marine
and other paths of activity
upon the waters of the world
have given life or still offer it
in the performance of heroic deeds
this monument is dedicated
by a grateful people.

FISHERY TRADE INDICATORS

(Expressed in Thousands of Pounds)

Item	Month	Latest month	Same month a year ago	Previous month
FRESH FISH LANDINGS				
Boston, Mass.	October	25,485	23,059	27,308
Gloucester, Mass.	do	17,447	9,887	20,346
Portland, Maine	do	1,691	1,890	2,190
Boston, Gloucester, and Portland:				
Cod	do	4,682	6,616	3,618
Haddock	do	10,240	7,748	14,524
Pollock	do	3,695	3,621	1,971
Rosefish	do	13,945	8,667	16,562
Pacific Coast:				
Halibut, North Pacific ports	do	110	1,898	6,352
Halibut, Seattle	do	27	1,539	3,297
FISH RECEIPTS, CHICAGO 1/				
Salt-water fish	do	2,078	1,391	2,073
Fresh-water fish	do	2,788	3,012	2,366
Shellfish, etc.	do	1,452	1,588	931
By truck	do	2,065	2,110	1,944
By express	do	1,309	1,842	1,828
By freight	do	2,944	2,039	1,599
COLD-STORAGE HOLDINGS 2/				
New York, N. Y.:				
Salt-water fish	November	7,097	5,241	5,790
Fresh-water fish	do	1,730	3,294	1,786
Shellfish, etc.	do	2,433	1,953	2,259
Boston, Mass.:				
Salt-water fish	do	19,430	16,929	14,610
Fresh-water fish	do	47	67	31
Shellfish, etc.	do	1,293	1,373	1,000
Chicago, Ill.:				
Salt-water fish	do	2,300	1,680	1,926
Fresh-water fish	do	2,395	2,075	1,880
Shellfish, etc.	do	1,390	1,005	831
Unclassified	do	251	313	186
United States:				
Cod fillets	do	3,224	2,681	2,313
Haddock fillets	do	10,068	7,716	11,682
Halibut	do	13,396	12,409	15,523
Mackerel	do	8,495	8,981	6,804
Pollock fillets	do	2,207	2,131	297
Rosefish fillets	do	5,243	1,485	4,781
Salmon	do	11,770	11,789	10,008
Whiting	do	12,035	10,231	13,208
Shrimp	do	7,302	5,801	3,808
New England, all species	do	32,005	29,470	30,588
Middle Atlantic, all species	do	22,897	15,631	19,872
South Atlantic, all species	do	7,148	4,592	6,954
North Central East, all species	do	15,798	13,826	13,932
North Central West, all species	do	5,076	3,742	4,334
South Central, all species	do	5,827	4,063	4,062
Pacific, all species	do	26,694	26,304	27,514
FOREIGN FISHERY TRADE 3/				
Exports:				
All edible fishery commodities	September	9,501	12,306	7,773
Canned salmon	do	593	8,096	253
Canned sardines	do	6,262	980	4,225
Canned shrimp	do	23	146	39
Imports:				
All edible fishery commodities	do	29,736	23,732	28,193
Fresh-water fish and eels, fresh or frozen	do	4,424	4,595	3,628
Canned tuna	do	259	544	14
Canned sardines	do	615	1,198	136
Cod, haddock, hake, etc., pickled or salted	do	4,264	3,270	4,235
Herring, pickled or salted	do	1,164	960	118
Crab meat, sauce, etc.	do	1,181	500	87
Lobsters, not canned	do	625	575	1,316
Lobsters, canned	do	124	183	161

1/ Includes all arrivals as reported by express and rail terminals, and truck receipts as reported by wholesale dealers including smokers.

2/ Data for individual cities are as of the last Thursday of the month, except those for Boston which are for the last Wednesday of the month, and those for geographical areas and the total of the United States which are as of the 15th of the month.

3/ From data compiled by the Bureau of Foreign and Domestic Commerce. Import and export data will be omitted until further notice.

Note.—Data for the latest month are subject to revision.

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ORGANIZING AND INCORPORATING FISHERY COOPERATIVE MARKETING ASSOCIATIONS

Fishery Circular No. 22

Cooperative associations have long been utilized by producers of agricultural commodities for marketing the products of the farm and for the purchase of equipment and supplies. Cooperation is receiving increasing interest among fishermen as an efficient means of purchase and sale.

Fishery Circular No. 22 entitled "Organizing and Incorporating Fishery Cooperative Marketing Associations", by L. C. Salter, was designed to meet the needs of groups of fishermen who desire information on the best methods for establishing cooperative marketing associations. The report stresses, among other things, the importance of careful preliminary study to determine:

1. Whether an association is needed;
2. The volume of products available for handling;
3. The functions or services the association is to perform;
4. Whether the association is wanted by those in a position to patronize it; and
5. The availability of sufficient funds to finance the organization during the period of establishment.

This booklet describes in detail the aims and principles of fishery cooperative associations, procedure for organizing an association, operating methods and policies, and legal requirements and corporate structure. It may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 5 cents.

